

ways in which these geographic automata may be united as a geographic automata system of spatially animate and non-animate urban entities. Some attention is devoted in this chapter also to elucidating the relationship between geographic automata systems and general concepts in geographic information science and systems. Chapter three focuses on the treatment of urban environments as systems. It includes a discussion of the early evolution of ideas about systems dynamics and their relationship to social science and geography. Systems, and the ideas about the evolution of systems, provide much of the background for contemporary development of automata principles, as well as understanding about the dynamics of urban environments. The fourth chapter focuses squarely on cellular automata. The development of cellular automata is traced from the early pioneering days in mathematics through its introduction to social science, geography, and urban studies. Chapter five turns the reader's attention to multi-agent systems, their origin, development and recent popularity, as well as their introduction to urban simulation. In the last chapter geosimulation is considered somewhat synoptically, within concepts of a potential paradigm shift, a revolution as the authors suppose, in geography and urban studies. They argue in this chapter that the use of geosimulation is more than simple tool-smithing. It represents a fundamental shift in the way they conceptualize models and think about the environment. In addition to illustrating and clearly explaining the theoretical and practical framework of geosimulation, this book sheds light on contemporary urban geography. The book is highly recommended for upper-level courses and seminars and will leave the reader with a sense that he or she has become a better scholar in this field.

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EMOTIONAL GEOGRAPHIES, edited by Joyce Davidson, Liz Bondy and Mick Smith. Hampshire UK: Ashgate Publishing Limited, 2005.

As suggested by humanistic-phenomenological geographers, emotions are key to the fundamental process of constructing space and place as illuminated by human geography. Considering this, any attempts at comprehensive understanding of human spatiality without listening carefully to its emotional dimensions is doomed to fail. This insight was primary in the cultural-humanistic turn which has been changing the geographical epistemology since the 1970s. Still only few works to date indeed focus exclusively on the role of emotions in peoples' spatial experience.

It is precisely within this gap that *Emotional Geographies* is penetrating. Focusing on the emotional complexity in the geography, the editors assemble in this volume more than twenty British humanistic scholars to present an abundance of work in this field. They exhibit a fascinating geographical mosaic composed of sixteen

chapters. Some of the chapters are more theoretical in their approach and some are more empirical; some are brief sketches from prolonged and well-known work of prominent scholars (Urry, chapter 6; Hepworth, chapter 13); and still others are quite refreshing portrayals of projects produced by young researchers. All of them stimulate the reader emotionally and cognitively.

The primary test of this kind of volume should thus be emotional. Without any doubt *Emotional Geographies* passes this test successfully by, for example, movingly dealing with the following themes: 'Where to die' as a major misgiving of terminal cancer patients and their close caregivers (Morris and Thomas, chapter 2); 'How to bear the burden of silence dictated by the social environment?' asked by mentally-ill people from remote and isolated communities in the Scottish highlands (Parr, Philo and Burns, chapter 7); 'How to cope with being socially invisible without becoming increasingly vulnerable?' as experienced by elder people who participate in therapeutic gardening activities in a community social club (Milligan, Bingley and Gatrell, chapter 4); what are the therapeutic projections of the natural landscape surrounding a respite care center as perceived by the guests of this institute, the majority of whom experience physical impairment and disabilities (Conradson, chapter 8), and so forth.

Yet, the contribution of this volume goes beyond simple expression of the emotions involved in the process of construction space and place. In order to draw some explicit theoretical statements the editors divided the diverse and interdisciplinary works in this collection into three subsections: "Locating Emotion", "Relating Emotion", and "Representing Emotion". The first, as they state, is in a way an extension of geography of health and embodiment. The chapters of this subsection illustrate how emotions are embodied and located in different socio-spatial environments and scales. People 'create' places of acceptance or (non)places of exclusion in their daily experience, by imagining the space, by sensing and feeling it and by interacting with it. The ability to express and feel a wide range of emotions in spatial circumstances is most significant since it often determines whether space becomes a place or a non-place.

The second subsection illuminates the socio-environmental dialectic. Works in this part demonstrate the continual echoing between the physical dimension of regions or sites and the socio-cultural arena of individuals and local communities. It turns out that in their self-landscape engagement, individuals interact with human, non-human and material objects surrounding them during highly charged processes emotionally. Not infrequently the boundaries between these ontological categories are being blurred when, for example, true realization of the self is achieved by extending processes of the self (human) to contain trees (non-human) or specific landscapes (material- inanimate) ensembles. Apparently, crystallization of the self is a dialectical symbolic process located in a spatial-temporal context, and in essence is not less emotional than a rational process.

The third subsection looks at the emotions underlining spatial representations.

Unavoidably, the discussion is directed to issues of interpretation and reflexivity. While it is quite simple to accept the argumentation that paintings or place-memories (as demonstrated in chapters 13 and 15) are composed of multilayer meanings so they could be subjected to cultural-spatial interpretative methodology, it is less simple to look at academic research itself as such. As Liz Bondy rhetorically asks toward the end: Is the production of spatial 'professional' knowledge free from interpretation? Is their any methodology which is emotionally an innocent process? The studies in this part and in the previous ones demonstrate how emotions are not just immanent to the human experience in the world that we are attempting to understand, but they are inseparable from our own academic efforts to explore this very same experience. In similar to the same ways as dreams, painting or memories, the geographical knowledge is a representation of space-culture situations, in which emotions assume a major role.

Appearing at the end of this volume, this insight does not make *Emotional Geographies* redundant, the opposite is true. It adds new perspectives to the discussion of the emotional in geography. It stimulates further thought and interpretation of the ways through which space is represented and become comprehensible, and the ways people are *placing* emotions.

Empirically and theoretically, *Emotional Geographies* contributes to the current discourse in humanistic geography by introducing the significance and the complexity in the multifaceted ways space and emotion are intertwined. However, two point of criticism should be raised. The first one concerns the mono-cultural nature of the volume. Being incongruent with the spirit of its own title, *Emotional Geographies* does not illuminate emotional geographies anywhere. Rather it sheds light on a limited part of the sub-discipline as most of the chapters are Anglo-centric in their cultural orientation and in their geographic study area. The second point is the attractiveness of the 'marginal' in this kind of research. The majority of the authors focus on linkages between social-marginality and emotional spatial experience. Naturally, marginality 'invites' such approach, but still emotions cross social categories and play a major role in the geographical realities of many diverse groups, among them miserable, post-trauma minorities as well as healthy and wealthy hegemonic groups such as the white middle class.

Underlying this criticism lies the hope for further studies such as those demonstrated fascinatingly in this volume, and for broadening them to a wider-scope reading on the emotional in the geographies of diverse individuals and groups from different cultural backgrounds, social class, religion or fate, and of course, from different regions on the globe.

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